

Chinese Citizenship 412.514.3990 qyin@andrew.cmu.edu

## Education.

#### **Carnegie Mellon University**

| Bachelor of Computer Science and Arts — 2020 in Computer Science & Music Technology

| Minor in Piano Performance

**GPA:** 3.89

| Dean's List for 4 semesters

# Coursework.

15-210 Parallel and Sequential Data Structure and Algorithm

15-213 Introduction to Computer Systems

15-251 Great Ideas in Theoretical Computer Science

11-411 Natural Language Processing

18-090 Multimedia Signal Processing

10-615 Machine Learning and Art

05-499 Human and Computer Interaction: Accessibility

15-322 Introduction to Computer Music

# Community Service.

#### Teacher/Data Analyst

Assemble — June-Aug 2018

Lead workshops that taught arts and technology to children of age 4-12 at Assemble, a Pittsburgh non-profit community space dedicated to fostering learning and creativity. Conducted data analysis of past attendees.

### Honors & Awards.

International Computer Music Conference Publication Frank-Ratchye Fund for Art @ the Frontier Grant "Physics Bowl" 6th Place, Global USAYPT(Physics) 6th Place AP Scholar with Distinction ATCL Piano Recital Diploma with Distinction HK-Asia International Piano Open - 1st place

# Technical Experiences.

#### Languages

C • Python • JavaScript • HTML5 / CSS • SML • Java • C# **Skills** 

Max/MSP • Framer • Nyquist • LaTeX

#### **Research Publication**

| Duo-Synth — Oct 2017-Present

A machine learning research that explores real-time Al algorithmic music generation based on multi-user motion capture.

- Published in August 2018 at the International Computer Music Conference
- Single layer convolutional network
- Python, Max/MSP, JavaScript

**Teaching Assistant** — Aug 2018-Dec 2018

- Introduction to Computer Music (15-322/622) Grader
- Multimedia Signal Processing (18-090) Lecturer/Grader

#### VR Researcher/Sound Engineer (Paid)

VR Home, Entertainment Technology Center

- June-Aug 2018

Funded by Verizon, a research of multi-user VR home spaces, aiming to make VR experiences comfortable and authentic.

 Designed sound for 4 spaces that are adapted by the current Abode project at Entertainment Technology Center

#### Front-End Educational Web-App Developer (Paid)

| The Zoom City Project, CMU — Sep-Dec 2017 Built 2 interactive children's e-books to teach children English. Implemented speech recognition with Web Speech API to collect sound data from young learners.

- Human computer interaction design
- JavaScript

#### Project Coordinator (Unpaid)

 $\mid$  MST Education Tech Ltd., Shenzhen, China - 2014-2016 Designed music education Android applications, including Kaixin Metronome, to encourage children to learn music.

- Apps released in Android market in early 2016
- Java

# Extracurricular.

#### **Music Performer/Experience Designer**

| The Exploded Ensemble, CMU — Jan 2017-Dec 2018 One of the founding members, I performed with keyboard and voice, designed lighting and visuals for stadium-sized performance spaces, composed original music.

#### Stage Manager

| Scotch'n'Soda Theatre, CMU — Jan-April 2017 Stage-managed the largest annual carnival theatre.

#### **Certified CRLA Level 1 Peer Tutor (Paid)**

| CMU Academic Development — Feb 2017-May 2018 Tutored 4 Computer Science courses: 122, 150, 213, 251